15

WHAT IS CLAIMED IS:

1. A compound of structural formula I:

$$R^{1}$$
 N
 A
 R^{4}
 R^{5}
 R^{1}
 R^{2}

or a pharmaceutically acceptable salt thereof, wherein;

V, W, X and Z are independently selected from CH and N;

R¹ is H, C₁₋₃ alkyl, C₁₋₃ alkoxy, F, or Cl;

R² is S(O)n R⁶, COR6 or CHO, wherein

n is 0, 1 or 2; and

 R^6 is $N(R^3)_2$ or C_{1-3} alkyl;

R³ is independently H or C₁₋₃ alkyl;

Ar is aryl or heteroaryl;

 R^4 and R^5 are independently selected from:

- (1) hydrogen,
 - (2) aryl, either unsubstituted or substituted with
 - (a) halo
 - (b) C₁₋₃ alkoxy,
 - (c)- $N(C_{1-3} \text{ alkyl})_2$,
 - (d) C2-4 alkanoyl, or
 - (e) aryl;
 - (3) nitro,
 - (4) C₁₋₅ alkyl,
 - (5) C₁₋₅ alkoxy,
- 25 (6) hydroxy-C₁₋₃ alkyl,

- (7) carboxy,
- (8) halo,
- (9) C₁₋₅ alkylthio,
- (10) C₁₋₅ alkoxycarbonyl,
- (11) pyridylcarbonyl,
- (12) benzoyl,
- (13) phenyl-C₁₋₃ alkoxy,
- (14) pyridyl, either unsubstituted or substituted with C_{1-3} alkyl or C_{1-3} alkoxy,
- (15) C3-6 cycloalkyl,
- (16) oxazolyl,
- (17) thiazolyl,
- (18) triazolyl,
- (19) phenoxy or
- (20) C₂₋₆ alkanoyl.
- 2. The compound of Claim 1 wherein Ar is phenyl, of structural formula I(a)

$$R^3$$
 R^4
 R^5
 R^5

10

15

I(a)

or a pharmaceutically acceptable salt thereof.

3. The compound of Claim 2 wherein X and Z are both nitrogen and V and W are both -CH=.

- 4. The compound of Claim 3 wherein R² is -SO₂(C₁₋₃ alkyl) or SO₂NH₂.
- 5. The compound of Claim 4 wherein R⁴ and R⁵ are independently selected from: phenyl, pyridyl, benzoyl, halophenyl, phenoxy, C₁₋₅ alkylpyridyl, benzhydryl, phenyl-C₁₋₃ alkoxy, NO₂, C₂₋₄ alkanoyl, halo, C₁₋₅ alkoxy, C₁₋₃ alkoxycarbonyl, C₁₋₅ alkylthio, triazolyl, carboxy, hydrogen, C₁₋₅ alkyl, pyridylcarbonyl, and C₁₋₃ alkoxyphenyl.
- 6. The compound of Claim 5 or a pharmaceutically acceptable salt thereof selected from those depicted in the following Table:

R ²	R ⁴
-SO₂CH₃	
-SO ₂ CH ₃	
-SO₂CH₃	
-SO₂CH₃	CHI
-SO ₂ NH ₂	
-SO ₂ NH ₂	CI

R² -SO₂CH₃ -SO₂CH₃ -SO₂CH₃ -SO₂CH₃ -SO₂CH₃ -SO₂CH₃

R ²	R ⁴ R ⁵
-SO ₂ NH ₂	Ĉ CH₃ O
-SO ₂ NH ₂	
-SO ₂ C ₂ H ₅	
-SO ₂ CH(CH ₃) ₂	
-SO ₂ CH(CH ₃) ₂	

7. The compound of Claim 1 wherein Ar is a 5- or 6-membered heteroaryl having, besides carbon atoms, 1 to 3 hetero atoms selected from N, O or S as atoms constituting the ring, or benzo- or pyrido- fused versions thereof of structural formula I(b);

$$\begin{array}{c|c}
R^{3} \\
O & N \\
A & R^{5}
\end{array}$$

$$\begin{array}{c|c}
R^{1} & V \\
V & I \\
R^{2}
\end{array}$$

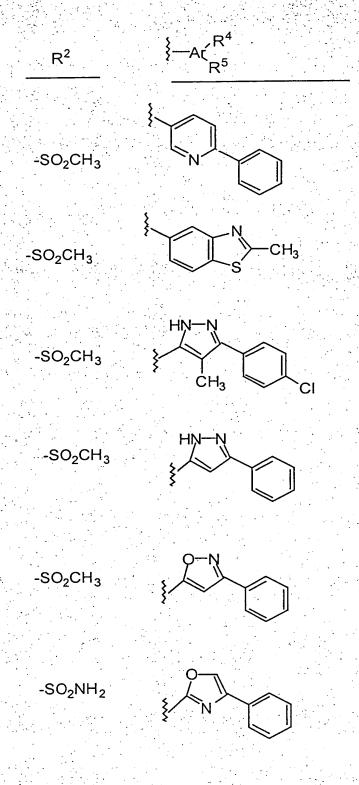
5

Í(b)

or a pharmaceutically acceptable salt thereof.

- 8. The compound of Claim 7 wherein X and Z are both nitrogen and V and W are both -CH=.
 - 9. The compound of Claim 8 wherein R² is -SO₂(C₁₋₃ alkyl) or -SO₂N(C₁₋₃ alkyl)₂.
- 10. The compound of Claim 9 wherein the heteroaryl group, Ar, is selected from: thiazolyl, thiadiazolyl, pyrazolyl, pyridyl, benzothiazolyl, oxazolyl, pyridothiazolyl, benzoxazolyl, quinolyl, pyrazinyl, thienyl, isoxazolyl, pyrimidinyl, benzimidazolyl, oxadiazolyl and imidazolyl.
- 20 11. The compound of Claim 10, or a pharmaceutically acceptable salt thereof, selected from those depicted in the following Table:

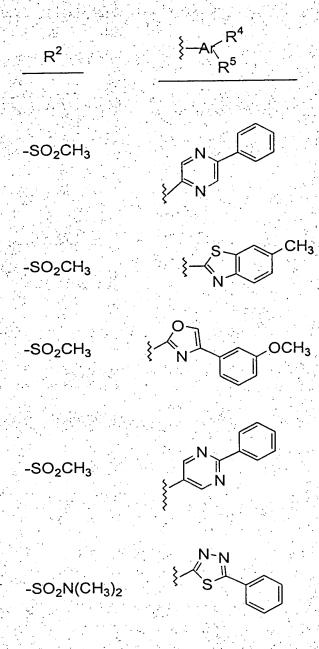
R ²	}—A(^{R⁴} R ⁵
-SO ₂ CH ₃	
-SO ₂ CH ₃	N-N S
-SO ₂ CH ₃	HN-N C
-SO ₂ CH ₃	



R^2	$\begin{cases} -A < R^4 \\ R^5 \end{cases}$
-SO ₂ CH ₃	
	\$
-SO₂CH₃	HN-N
	HN-N
-SO ₂ CH ₃	OCH ₃
-SO ₂ CH ₃	HN-N OCH ₃
-SO ₂ CH ₃	HN-N OCH3
-SO ₂ CH ₃	

R^2	}-A(R ⁴
-SO ₂ CH ₃	N-N S CI
-SO₂CH₃ કૃ	OCH ₃
-SO₂CH₃ ફ્	S OCH3
-SO ₂ CH ₃	
-SO ₂ CH ₃	$ \begin{array}{c} \\ \\ \\ \\ \\ \\ \end{array} $
-SO ₂ CH ₃	\$ S F F

R ²	}——Ar R ⁵	
-SO ₂ CH ₃	2 - N	OCH
-SO ₂ CH ₃		
-SO ₂ CH ₃		CI
-SO ₂ CH ₃	3-N	CI
-SO ₂ CH ₃		OCH₃
-SO₂CH₃	S	CI



20329Y

	R4 }-Ar R5	
-SO ₂ NH ₂		
-SO ₂ CH ₃		
-SO ₂ C ₂ H ₅		оснз
$-SO_2C_2H_5$		

$$-SO_{2}CH_{3}$$

$$-SO_{2}CH_{3}$$

$$-SO_{2}CH_{3}$$

$$-SO_{2}C_{2}H_{5}$$

$$-SO_{2}C_{2}H_{5}$$

$$-SO_{2}C_{2}H_{5}$$

$$-SO_{2}C_{2}H_{5}$$

12. The compound of Claim 1 wherein one of X and Z is N and the other is -CH= of structural formula I(c):

20329Y

$$\begin{array}{c|c}
R^3 \\
0 \\
X
\end{array}$$

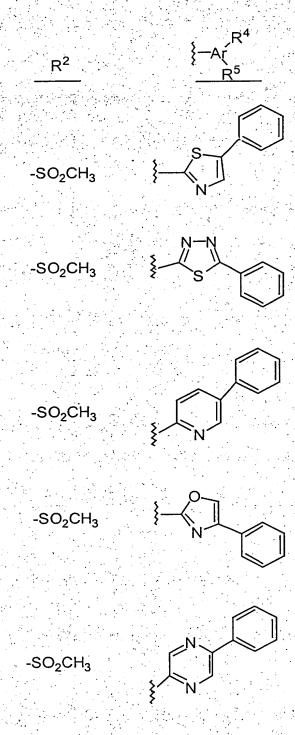
$$\begin{array}{c|c}
R^5 \\
\end{array}$$

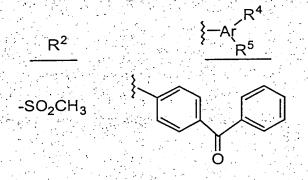
$$\begin{array}{c|c}
R^5 \\
\end{array}$$

I(c)

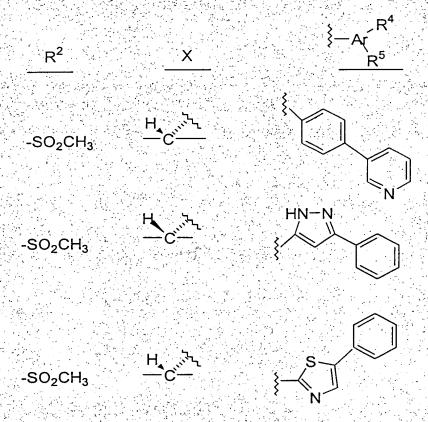
or a pharmaceutically acceptable salt thereof.

- 5 13. The compound of Claim 12 wherein X is N, Z is -CH= and V and W are both -CH=.
- 14. The compound of Claim 13, or a pharmaceutically acceptable salt thereof selected from those depicted in the following Table





- 15. The compound of Claim 12 wherein X is -CH=, Z is N and V and W are both -CH=.
- 16. The compound of Claim 15 or a pharmaceutically acceptable salt thereof, selected from those depicted in the following Table;



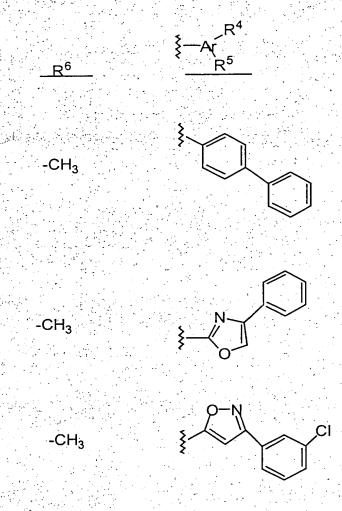
R ²	×	}—Ar R4
-SO ₂ CH ₃	H. C.	
-SO ₂ CH ₃		N-N S
-SO₂CH₃	H. C	N N N N N N N F
-SO₂CH₃	H	N=N N F
-SO₂CH₃	H, 1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1	CH ₃
-SO₂CH₃	H, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	N

17. The compound of Claim 1 wherein R² is -COR6 of structural formula I(d):

$$\begin{array}{c|c}
R^3 \\
O & N_- \\
Ar & R^4
\end{array}$$

$$\begin{array}{c|c}
R^1 & \downarrow & \downarrow \\
V & \downarrow & \downarrow \\
\hline
V & \downarrow & \downarrow$$

- 5 or a pharmaceutically acceptable salt thereof.
 - 18. The compound of Claim 17 or a pharmaceutically acceptable salt thereof selected from those depicted in the following Table:



19. The compound of Claim 1 of structural formula I(e), wherein one of V or W is nitrogen and the other is -CH=.

20329Y

- 20. The compound of Claim 19 wherein R¹ and R³ ar both hydrogen.
- 21. The compound of Claim 20 wherein R² is -SO₂CH₃ or -SO₂NH₂.
- 22. The compound of Claim 21 selected from the compounds
 depicted in the following TABLE

- 23. A method of treating Y5 receptor mediated diseases which comprises administering to a patient in need of such treatment a non-toxic therapeutically effective amount of a compound of Claim 1 that selectively antagonizes the Y5 receptor in preference to the other NPY receptors.
 - 24. The method of Claim 23 wherein the Y5 mediated disease is obesity.

25. A pharmaceutical composition which comprises a pharmaceutically acceptable carrier and an effective amount of a selective Y5 antagonist.